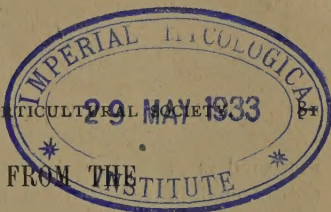


WESTERN NEW YORK HORTICULTURAL SOCIETY



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WESTERN NEW YORK HORTICULTURAL SOCIETY FOR 1886.

ESSAYS.

CONTROLLING PEAR BLIGHT.

BY J. C. ARTHUR.

In the days when the cause of this dreaded disease of fruit trees was not known, every man could claim that his remedy or preventive, was the one the public should put implicit faith in, and fear no unanswerable proof to the contrary. The subject now stands in a different light. We know that the disease is caused by germs which enter the tree from the air. An entrance is effected through the most recent and tender growth, especially of early spring. Having gained a foothold in the tree, the disease spreads along the limbs with varying rapidity according to conditions of the weather and nature of the tree.

Such being the facts, a number of remedies which have been advocated from time to time, can no longer be entertained as of any value. Among these are the application of lime to the soil, or burning the soil, supposing this will kill a fungus that induces the disease by being absorbed through the roots; the application of sulphur or lime to the trunk and limbs to destroy a fungus thought to pass through the bark and start the disease; dusting the branches when moist with dry sulphur, or lime; applying salt,

iron cinders, ashes, or special fertilizers to the soil; slitting the affected branches with a knife, hoping thereby to let out a poisonous sap; removing the outer bark of diseased limbs expecting it to be replaced by a healthy growth; the growing of some particular variety under the impression that it is blight proof; and so on.

Among proposed measures still worthy of some attention, although largely from different reasons than those assigned by former advocates, are the selection of hardy varieties, not because the disease is caused by the freezing of the sap in winter, but because such trees will have a more vigorous constitution to withstand disease; moderate pruning, root pruning and withholding high cultivation, all tending to give a more moderate and uniform growth; adoption of varieties least influenced by the disease, such as the Seckel; and other precautions, all of restricted and uncertain application.

It is unwise to expect any universal preventive of this disease. It will in the future, as in the past, do very little damage some years, and in others increase to a scourge. It is, however, reasonable to believe that we may yet discover some means of lessening its ravages, and keeping it, to some extent, in check. There is yet no indication in what manner this is to be accomplished. The knowledge of germ diseases in plants is yet so new and meager that even the direction in which we are to look for relief does not yet appear.

At present the remedy that is more valuable than all others, and which should be the main reliance of the cultivator, is the very old one of cutting away diseased branches. If this is done thoroughly upon first appearance of the disease, and each week or two for a while thereafter, it will insure the least possible loss from the disease. The principal precaution to be taken is to cut a foot or two below the lowest indications of the disease, as shown by the brownness of the inner bark. This remedy, the best now known, yet but partially satisfactory, is not likely to be supplemented by any very important remedy or preventive, until we have a wider and more intimate knowledge of germ diseases in general, and especially of those of plants.